

# Correlation between the Availability of Resources and Efficiency of the School System within the Framework of the Implementation of Competency-Based Teaching Approaches in Cameroon

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#### Abstract

The study takes an in-depth examination of the extent to which the availability of resources relates to the efficiency of the school system within the framework of the implementation of competency-based teaching approaches in Cameroon. The study employed a mix of probability sampling approaches, namely simple, cluster and stratified random sampling techniques to select the 375 teacher-respondents and purposive sampling technique to select the 26 principals for the study. Data collected through questionnaire and interview schedules were subjected to descriptive and inferential statistical analysis using the Statistical Package for the Social Sciences (SPSS) Version 20.0. The findings indicated that there is a significant relationship between the availability of resources and the efficiency of the school system. The magnitude of the relationship that exists was rated low. It is thus recommended that a legislation that institutes an education tax on all workers of the formal sector in Cameroon be enacted to take care of the inadequate resources.

Keywords: Competency-Based Teaching Approaches (CBTAs), Efficiency, Implementation, Resources.

#### 1. Context of the Study

Educational reform policies all over the world call for a transformation from a school that was mostly based on contextual knowledge acquisition to a school aimed at empowering learners to help them cope with complex and diversified real life situations. These reform agendas insist that we should have schools that are deeply rooted in a society that takes into account sustainable development, local knowledge and cultures instead of a school cut from society. There is therefore a strong need to overhaul the training received in secondary general schools in Cameroon from its traditional content-based approach to the adoption of a pedagogic paradigm relating to the more pragmatic and functional Competency-Based Teaching Approaches (CBTAs). This paradigm shift is in line with the provisions of the 2009 Growth and Employment Strategy Paper (GESP) and the general purpose of education in Cameroon prescribed in section 4 of Law No. 98/004 of April 14, 1998 to laydown guidelines for education in Cameroon whose orientations, within the framework of an emerging Cameroon in the year 2035, are geared towards the training of citizens for their intellectual, physical, civic and moral development and their smooth integration into society. This paradigm shift is equally justified by Kerka (1998) and Moon (2007) who argue that Competency-Based Education (CBE) measures each individual's achievement against a set of competency standards rather than against the performance of another individual. In the same vein, Erridge & Perry (1994), Harris et al. (1995) and Moon (2007) corroborate this stance when they reported that it is seen to give individuals opportunities to gain competencies that are relevant to the workplace, since CBE promotes a link between education and workplace requirements. Education through the Competency-Based Approach (CBA) will therefore provide the nation's human resources with the knowledge, skills and attitudes necessary for building an emerging Cameroon by the year 2035. In this respect therefore, reforms in the Cameroon educational system adopted the Competency-Based Approach (CBA) in teaching as the new education policy in the 2012/2013 academic year as part of the ongoing global reform.

However, although education stakeholders in Cameroon claim that the education system is competency-based, there is no clear evidence from research which indicates the extent of the implementation of this policy or factors that militate against its smooth implementation. In other words, whether or not teachers are even implementing the educational policy at all at the secondary education level to merit such rhetoric. Generally, some studies carried out elsewhere have revealed low levels of implementation and implementation constraints characterized by serious shortage of well qualified and expert teachers competent enough to guide learners through the new competency-based curriculum and learning styles, and the absence of an assessment and examination regime able to reinforce the new approaches and reward students for their ability to demonstrate what they know, understand and can do (Alphonce, 2008; Mgalla and Mbulanya, 2008; Komba and Nkumbi, 2008; Woods, 2008).

# 2. Literature Review

Fundamentally, a public policy is a government action or proposed action directed at achieving certain desired



goals or objectives (Ikelegbe, 2006). Ikelegbe (2006:3), in a more elaborate form, defines policy thus: "It is the integrated course and programmes of action that government has set and the framework or guide it has designed to direct action practices in certain problem area." In essence Ikechukwu and Chukwuemeka (2013) contend that a policy is a course setting action that provides the direction, the guide and the way to the achievement of certain goals or objectives desired by government. To Ezeani (2006), it is the proposed course of action which government intends to implement in respect of a given problem or situation confronting it. From the forgoing therefore an education policy implementation can be defined as the process of putting formulated education policy (such as Competency-Based Education) into effect or action in schools.

Competency-Based Education (CBE) generally refers to an educational movement that advocates defining educational goals in terms of precise measurable descriptions of knowledge, skills and behaviors that students should possess at the end of a course of study (Bowden, 1997; Richards & Rodgers, 2001). In this regard, Richards and Rodgers (2001) hold that the competency-based approach focuses on the outcomes of learning. It addresses on what the learners are expected to do rather than on what they are expected to learn about. According to Deißinger and Hellwig (2011), Competence-Based Education and Training (CBET) aims at preparing learners more effectively for real workplaces, which means that the acquisition of competences takes into account the requirements of the workplace. The self-paced and flexible structure of CBET programs should encourage learners to become responsible for their individual learning process. Kafyuililo et al. (2012) conclude by remarking that competence-based education is a productive education which focuses on what an individual does with the education he claims to possess. The primary focus of competence-based education is not possession of education but what one does in real life with the possessed education (ibid). From the forgoing, the commonality or common denominator amongst all these definitions is that competency-based approach to teaching is a student-centered method of teaching which seeks to bridge the wall between school or the classroom and everyday real life.

For a successful educational policy implementation, enabling resources need to be adequate. Makinde (2005) argues that without sufficient resources laws will not be enforced and services will not be provided. Many other scholars agree that resources are considered fundamental and undoubtedly necessary for any policy implementation, and are recognized as essential factors in the effectiveness of policy implementation (Van Meter and Van Horn, 1975; Cheema and Rondinelli, 1983; Mazmanian and Sabatier, 1989; Sabatier and Jenkins-Smith, 1993; Voradej Chandarasorn, 2005). Pressman and Wildavsky (1979) have equally stated that resources are important for policy to be successfully implemented. From the policy change and learning theory perspectives, resources are distributed to the policy subsystems, which will use them to implement the policy (Sabatier and Jenkins-Smith, 1993). Specifically, a study of the challenges of policy formulation and policy implementation of primary education in Bangladesh by Rahman in 2008 revealed that resources are vital in policy implementation. In particular, the study revealed that technical resources such as computers and other related technology and sufficient human resources helped to make certain of policy effectiveness at the primary level (Rahman, 2008). Resources can either be human, financial or physical (technical or material).

The sufficiency of human resources is an important factor that affects implementation effectiveness (Pressman and Wildavsky, 1979). For example, the availability of manpower with the necessary knowledge base in competency-based teaching (e.g. in lesson planning, lesson delivery and evaluation) will facilitate the implementation of CBTAs in schools and the reverse is equally true.

In terms of financial resources, key academics point out the importance of financial resources. For example, Van Meter and Van Horn (1975) support this statement by pointing out that in addition to standards and objectives, policy makers will make available necessary resources that will help the administration. For successful CBTAs implementation, supporting resources need to be adequate. Schools may need additional financial support to run activities that are vital to students' achievement. Financial resources are a key factor for successful implementation and they come from the allocated funds of the government, registration and tuition fees as the case may be. In addition, incentives in the form of remunerative power (such as salaries, commissions, fringe benefits etc.) is usually the most effective means of inducing in policy implementers the willingness to achieve a satisfactory standard of enforcement and compliance (Thawilwadee, 1998; Pairote, 2003; Pairote, 2003). Sufficient incentives, both monetary and non-monetary provided to policy implementers will likely make them more willing to comply with government policy. The former includes salaries and other fringe benefits while the latter includes career path development such as promotion and recognition. Career path development such as promotion and relocation, as well as other benefits, plays a key role in strengthening professional growth and skills, and has an impact on students eventually (Northcraft and Neale, 1994).

Technical resources is one of the many capacity dimensions of a school to which high student performance depends on. Many authors hold that they are part of the mechanism that boosts student achievement. Technical resources are, for example, a high-quality curriculum, books, and other instructional materials, assessment instruments, laboratory equipment, computers, and adequate work space (Corcoran and Goertz, 1995; Gamoran and Marrett, 2000; O'Day, Goertz and Floden, 1995 all cited in Chompucot, 2011).



In the words of Adams (1993), efficiency as a concept may be defined simply as the relation of outputs to inputs. Or more precisely: "Economic Efficiency" is defined as existing when the value of an output is maximized for a given cost of inputs or where the cost of inputs is minimized for a given value of output. This definition is in phase with that of Low (2000) who says that efficiency measures relationship between inputs and outputs or how successfully the inputs have been transformed into outputs. According to Cornali (2012), it concerns the ability to achieve assigned aims by making the best use of all allocated resources. In the context of education, Mbua (2002) defines educational efficiency as the relationship between the outputs of the educational system and the inputs used in producing such outputs. Examining the meaning of inputs and outputs in education, inputs are the various elements that enable the education system to properly function. Inputs include the human resources such as teachers, educational managers, students and nonhuman resources like educational materials, buildings, different machineries and equipment that are required for the normal functioning of the teachinglearning process in a school (Coombs and Hallak, 1987; Psacharopoulos and Woodhall, 1985). Educational output, on the other hand, refers to the expected results of the objectives of the system mainly student achievement. The knowledge, skills, attitudes and exposures the students acquire from the schools are indicators of the output of an education system (Coombs and Hallak, 1987; Psacharopoulos and Woodhall, 1985). Educational efficiency can be seen from two perspectives, namely internal efficiency and external efficiency. Longe and Durosaro (1988) cited in Olatoun (2012) referred to internal efficiency as the extent of the educational system's ability to minimize cost and reduce wastage resulting from repetitions, dropouts and failures. Lerotholi (2001) narrates that since internal efficiency is calculated on the basis of dropout, repetition and promotion rates, when dropout and repetition rates are high before the end of each education cycle, then that portion of the education system is said to have serious internal inefficiency. External Efficiency refers to the attainment of social goals or objectives. It measures not the 'immediate output but the ultimate benefits' that is gained by passing through the system. External efficiency of an educational system is realized through the relevance of education to socioeconomic conditions of a country (ibid). Tsang (1988) concludes that the ability of graduates to integrate the labor market following the completion of education can be seen as an indicator of educational efficiency.

#### 3. Statement of the Problem

It has been observed that many school leavers, notably those from the secondary general education sector in Cameroon after completing various levels are not prepared to confront the ever demanding and evaluative employment market apparently due to the quality of training received in schools; putting to question the external efficiency of the school system. Therefore, the need for the education system to produce graduates with employable skills necessitated the adoption of Competency-Based Teaching Approaches (CBTAs) in Cameroon secondary general schools in the 2012/2013 academic year. However, the effective implementation of this education policy seems to pose a challenge to teachers going by verbal and written reports after routine supervision of teachers and discourses made at different educational fora which all reveal that a significant proportion of teachers are apparently still teaching using the traditional content-based instructional approaches and assessment strategies. A gap between formulated educational policy and goal attainment (performance of graduates in the production sector), which informed the basis of this study, therefore exist due to inadequate or poor policy implementation. This study establishes that an over-sight of one of the many factors influencing policy implementation i.e. the availability of resources, prior to and during the implementation of CBTAs in Cameroon may significantly account for the poor implementation of the education policy and by extension account for the weak efficiency of the school system.

#### 4. Objective of the Study

The objective of this study is to investigate the extent to which the availability of resources relate to the efficiency of the school system.

#### 5. Research Question

To what extent does the availability of resources relate to the efficiency of the school system?

# 6. Hypothesis of the Study

**Ho:** There is no significant relationship between the availability of resources and the efficiency of the school system.

**Ha:** There is a significant relationship between the availability of resources and the efficiency of the school system.

# 7. Methodology

This descriptive study based on the cross-sectional survey approach adopted the triangulated technique as it



relied on collecting and analyzing data using quantitative and qualitative strategies.

#### 7.1 Participants

The study involved 375 teachers and 26 principals proportionately drawn from 13 public and 13 private secondary general schools in the North West and South West Regions of Cameroon. These category of participants were selected for the study because they are the primary implementers of CBA policy in Cameroon and because they equally possess all the necessary information about the target population, especially as they all had similar teacher training. The study employed both probability and non-probability sampling approaches in multiple stages to come out with the sample. While non-probability sampling technique, notably purposive sampling was used to select the 26 principals of the participating schools for the study, probability sampling was used to select both the participating schools and teacher respondents for the study. Concerning the latter, the cluster sampling technique and the stratified random sampling technique were employed respectively to guarantee a proportionate representation of all the administrative divisions of the two regions and the two school types (public and private) in the sample. Finally, a simple random sampling technique using the table of random numbers was employed to actually select the teacher respondents from the different staff lists in each of the 26 participating schools (clusters).

#### 7.2 Instruments

The study used two data collection instruments, namely the questionnaire and interview guide to capture quality information that represents teacher's and principal's perspectives on all the indicators of the variables of the study.

# 7.2.1 Questionnaire

The questionnaire which was administered to all the 375 teachers and 26 principals who participated in the study was developed by the researcher to assess the indicators of the availability of resources and the efficiency of the school system. All the items were pre-coded on a 5-point Likert-type scale as Strongly Agree (SA), Agree (A), Disagree (DA), Strongly Disagree (SDA) and Undecided (U). In addition, there were two open-ended questions requiring every participant to describe the performance of the Cameroon school system in terms of the quality of training received and the employability of the school leavers in the job market and also cite other resources they think are required for the smooth implementation of CBA in secondary general schools in Cameroon.

# 7.2.2 Interview Guide

It was used to carry out interviews with 26 participants of the study. To achieve this objective, 24 teachers and 2 principals (reflecting their respective proportions in the sample size) randomly selected from amongst the 26 participating schools were interviewed on the issues at stake in this study. They were asked questions during interviews which focused on rating the extent to which the availability of resources are related to efficiency of school system in Cameroon.

#### 7.3 Data Analysis

Data obtained from the questionnaire were subjected to the Statistical Package for Social Sciences (SPSS) version 20.0 analysis to compute means and standard deviations. Means and standard deviations were equally computed for qualitative data from interview schedules. Finally, content analysis was used to analyze the two open-ended items of the questionnaire and the last item on the interview guide.

The hypothesis based on the lone research question of the study was verified using Pearson Product-Moment Correlation Analysis, specifically the Pearson Product-Moment Correlation Index at 0.05 alpha level of significance (2-tailed).

#### 8. Results

The results of this study are classified according to the research question and hypothesis of the study.

**8.1 Research Question:** To what extent does availability of resources relate to the efficiency of the school system?



Table 1. Computation of Means  $(\overline{X})$  and Standard Deviations (SD) for Responses Related to the Availability of Resources

S/N	Availability of Resources (Human, Financial and Technical/Material	Response Options and Frequency			Mean	SD		
5/11	Statement	SA	A	DA	SDA	U	(X)	~2
1	We lack qualified manpower or experts in CBA in my school	120	37	82	161	/	2.70	0.63
2	We have limited access to quality continuing professional development programmes (e.g. seminars/workshops and mentors) for in-service teachers	121	63	116	100	/	2.49	0.44
3	We have adequate experience, appropriate pre-service training to promote competency-based teaching	143	111	100	46	/	2.88	0.72
4	We lack adequate incentives/rewards (e.g. low salaries) to promote competency-based teaching	111	124	100	65	/	2.3	0.46
5	We have limited financial resources in my school (e.g. lack of funding to run training seminars for teachers) to promote CBA implementation	133	109	79	79	/	2.26	0.39
6	There is sufficient budget in my school to support CBA activities	78	100	116	106	/	2.38	0.56
7	The classroom context (large and over-crowded) in my school is poor to promote competency-based teaching	104	112	80	104	/	2.46	0.34
8	We have adequate CBA-designed manuals and other didactic materials to promote competency-based teaching	64	96	134	106	/	2.3	0.64
9	We lack sufficient time for each teaching period to permit teachers to go through the very demanding competency-based teaching programmes	140	60	100	100	/	2.40	0.70
	OVERALL MEAN					2.46		

Note: SA = Strongly Agree, A = Agree, DA = Disagree, SDA = Strongly Disagree and U = Undecided

From table 1 above, since the overall mean is 2.46, the extent of availability of resources is low going by the logic of table 2 that below.

**Table 2. Determination of Magnitude** 

Magnitude	Range	Maximum Value
High	3.0 to 4.0	
Moderate	2.6 to 2.99	4
Low	2.0 to 2.59	4
Very Low	0 to 1.9	

Table 3. Computation of Means  $(\overline{X})$  and Standard Deviations (SD) for Responses Relating to School Efficiency

Efficiency							
S/N	Efficiency of the School System		Response Options and Frequency				SD
	Statement	SA	A	DA	SDA	$(\overline{X})$	
1	The failure rate in my school (students who score below average) is generally high	86	93	138	83	2.54	0.7
2	The repetition rate in my school is generally high	63	84	143	110	2.25	0.12
3	In my school only a small proportion of students who enter form one actually complete with a GCE certificate in form five or upper sixth (high dropout rates)	56	90	138	116	2.22	0.5
4	We have regular attendance of students in my school	100	88	109	123	2.36	0.06
5	We have poorly adapted and overloaded programmes in schools	94	79	101	126	2.35	0.06
6	Teachers lack a reliable statute	116	88	120	76	2.39	0.82
7	Job satisfaction is absent in my school	113	111	83	93	2.34	0.82
8	The school system is flooded with qualified teachers	125	86	79	110	2.56	0.51
9	School leavers from secondary general education are not easily integrated into the job market	133	99	104	64	2.25	0.61
10	Pedagogy in schools fosters knowledge reproduction rather than knowledge application	93	112	112	83	2.54	0.74
11	The curriculum content in schools is irrelevant to the local workplace realities	/	109	104	96	2.51	0.8
OVERALL MEAN						2.18	

Note: SA = Strongly Agree, A = Agree, DA = Disagree, SDA = Strongly Disagree and U = Undecided

With an overall mean of 2.18 the efficiency of the school system is low based on the logic of table 2



#### **Response to Research Question**

Results on table 1 above show that with an overall mean of 2.46, the extent of the availability of resources is low and the school efficiency with overall mean of 2.18 is also low as shown in table 3. Therefore, the low availability of resources put in place for the implementation of competency-based teaching in Cameroon relates to a low school efficiency.

#### 8.2 Hypothesis Testing

**Null hypothesis (H\_0):** There is no significant relationship between the availability of resources and the efficiency of the school system.

Alternative hypothesis (H<sub>a</sub>): There is a significant relationship between the availability of resources and the efficiency of the school system.

Table 4. Summary of Computed Value for Pearson Product-Moment Correlation Coefficient for the Relationship between the Availability of Resources and Efficiency of the School System.

Variable of Interest	Availability of Resources		Efficiency of the School System
	Pearson Correlation Coefficient Value	0.159	
Availability of	Direction	Two-tailed	0.000
Resources	N	400	400
	df	399	399
Efficiency of the School	Pearson Correlation Coefficient Value		0.159
System	Direction	Two-tailed	0.000

# P<0.05, df=399, $\Upsilon_{xy}$ critical value = 0.098, correlation is low Verification of Hypothesis

The summary of SPSS in table 4 shows that, at alpha level of significance 0.05 with degree of freedom 399, the computed correlation coefficient value is 0.159.

Since r-computed (0.159) is greater than r-critical (0.098), the null hypothesis is rejected and the alternative form retained. Inference made leads to the conclusion that, there is a significant relationship between the availability of resources and the efficiency of the school system.

Table 5. Magnitude of Relationship

Magnitude	Range	Maximum Value
High	0.6 to 1	
Moderate	0.3 to 0.59	1
Low	0 to 0.29	

Based on table 5 above, since the computed or calculated value of r (0.159) falls within the range 0 and 0.29, the magnitude of the relationship is low. This implies that, in this study, there exist a low relationship between the availability of resources and the efficiency of the school system.

## 9. Discussion

In order to properly articulate the relationship between the availability of resources and the efficiency of the school system in Cameroon which is the main objective of this study, the plan of presentation of the discussion of findings first of all independently presents the state of the availability of resources and efficiency of the school system before discussing their relationship.

# 9.1. Availability of Resources

These resources include human, financial and technical/material resources. Talking about human resources, the results confirmed that the availability of qualified manpower or experts in CBA in schools (with a mean value of 2.70) and the possession of adequate experience and appropriate pre-service training to promote competency-based teaching (with a mean value of 2.88) were moderate as shown in table 1 above. This is justified by the results obtained in the demographic information relating to the description of respondents according to their highest professional qualification and years of teaching experience respectively; which indicates that an overwhelming majority of the respondents had at least a first degree, a master's degree or a PhD and 69.3 % of the respondents have been teaching for at least 11 years. However, the results indicate that access to quality continuing professional development programmes is limited (with a mean value of 2.49). These results are equally justified by the statistics obtained from the demographic information of respondents which reveals that majority of the respondents were exposed to at most two short duration seminars (of a day or two) per academic year which is largely insufficient to go through the very demanding mastery of competency-based teaching approaches.

Referring to the availability of financial resources, all the indicators in table 1 showed a low mean value



which include: lack of adequate incentives/rewards (e.g. low salaries) to promote competency-based teaching, lack of funding to run training seminars for teachers in schools to promote CBA implementation and insufficient budgets in schools to support CBA activities. In the absence of finances the promotion of competency-based teaching in schools is greatly hampered.

With regards to the availability of physical (material/technical) resources, all the indicators in table 1 show a low mean value characterized by poor classroom context (large and over-crowed) in schools to promote competency-based teaching, inadequate CBA-designed manuals and other didactic materials to promote competency-based teaching and lastly the lack of sufficient time for each teaching period on the timetable to permit teachers to go through the very demanding competency-based teaching programmes. Referring to poor classroom context in schools to promote competency-based teaching, the demographic results of this study indicated that most of the respondents are teaching large classes. Classes with student enrolment of 41 to 60 constituted a percentage of 30.0, above 80 constituted 25.3%, between 61 and 80 the rate was 22.8%. With this, the teacher will not have the opportunity to interact with the students on a one to one basis due to poor circulation in class and difficulty in carrying out formative assessment as required by competency-based teaching. CBA teaching strategies such as group work, role playing etc. need to be exercised in enough space to allow active and maximum participation of all leaners.

In addition, when asked to state what other resources are required for the smooth implementation of CBTAs in Cameroon schools, respondents recommended the putting in place of Information and Communication Technology (ICT) and internet facilities in all schools, building and adequate equipment of libraries in schools and the subvention by government to private schools be increased for them to meet up the salary demands of their teachers who are currently grossly underpaid.

The above results are in tandem with the findings of Mulaudzi (2009) who investigating how educators in South Africa perceived the Outcome Based Education (OBE) system pointed out three critical issues as variables hampering the successful implementation of OBE. These included lack of resources, educators who lack professional competence, and inefficient framework of continuing professional development and support programmes which would equip educators with hands-on skills to translate the curriculum into classroom practices. In addition, Mulaudzi (2009) quoting the 2002 report of the Department of Education (DoE) went further to state that the way the new curriculum was being implemented left a lot to be desired. The DoE attributed poor implementation to inadequate resources, lack of on-going curriculum support, unsuitable infrastructure and teachers' incompetence to understand the outcome-based concepts. In addition, the demographic information of the participants indicated that educators from the sample work in crowded classrooms. This position is also supported by findings in a study carried out in Benin by Issaou, Raphael & Hooft (2008).

#### 9.2. Efficiency of the School System

With respect to the efficiency of the school system in Cameroon, the findings of this study reveal that both the internal and external efficiencies of school system in Cameroon are weak with an overall mean of 2.18 as shown in table 3. The *internal inefficiency* of the Cameroon school system on the one hand is characterized by a pedagogy that fosters knowledge reproduction rather than production, high drop-out rates, irregular attendance, high repetition and failure rates, and poorly adapted and overloaded programmes; worsened by poor quality teaching and irrelevant curriculum content that do not match with local or workplace realities. The *external inefficiency* of the system on the other hand is manifested by the fact that a good number of those trained by the system are not able to effectively integrate into the national production sector as revealed by the respondents.

The above results are confirmed by the content analysis of the responses to the open-ended question on the questionnaire to which participants of the study were asked to briefly opine on the performance of the Cameroon school system in terms of the quality of training received and the socio-professional insertion (or employability) of the school leavers in the job market. The results generally indicated that the performance of the Cameroon school system does not orientate to jobs, its performance is low because the educational system does not encourage creativity and the quality of training is low for job seekers.

The above findings are consistent with the conclusions of Fonkeng (2005) and the Draft Document of the Sector Wide Approach/Education (2006) who all note that the entire formal system of education in Cameroon is fraught with many shortcomings including a weak internal and external efficiencies of the system.

# 9.3. Relationship between the Availability of Resources and Efficiency of the School System

The lone objective of this study was to determine the extent to which the availability of resources relates to the efficiency of the school system. After the testing and verification of the hypothesis, inference made leads to the conclusion that there is a significant relationship between the availability of resources and the efficiency of the school system. The magnitude of the relationship that exists is rated low. Implying that in this study, there exist a low relationship between the availability of resources and the efficiency of the school system. The above



findings indicate that the low availability of resources put in place for the implementation of CBTAs in Cameroon relates to a low school efficiency.

The above results are consistent with the interview responses which rated the link between the availability of resources and the performance of the school system. With an overall mean value of 2.23 computed from responses of the interview, the availability of competency-based teaching resources is judged to be low. However, responses for the interview item that sought to rate the extent to which the availability of experts or qualified man power in competency-based teaching (lesson planning, lesson delivery and evaluation) and the enhancement of success of students in internal exams show a mean value of 2.65. Meaning that the rate of availability of experts or qualified man power is moderate; which ties with the results in table 1 relating to the questionnaire items.

Lastly, when respondents were asked how the availability or not of resources in schools affected the performance of the school system in Cameroon, content analysis of interview results showed that when teaching resources are not available, no impact will be created in schools, no good results will be realized and teachers will not be motivated. On the contrary, when they are available, they will create positive impacts. In sum, inadequate provision of resources as shown by the results of this study hampers the successful implementation of CBTAs in schools and hence the low efficiency of the school system.

The above findings are in line with Nakachwa (2009) who revealed that the availability of educational resources all had a positive correlation with the internal efficiency in the schools in the upper primary in Wakiso District in Uganda. He explained that many schools lacked adequate educational resources in form of human resources, instructional materials and funds and this greatly contributed to in their internal inefficiency in form of increased school dropouts, increased repetitions and poor performance. In areas where educational resources were relatively available, internal efficiency was at a relatively improved level. Nakachwa therefore concluded that the availability of educational resources greatly boosted the internal efficiency in schools.

In like manner, the above findings are consistent with the findings of Adeyemi (1989) who found out that the performance of students was positively related to the rate of utilization of the available resources vis-àvis human and physical resources.

In addition, the findings are also consistent with the findings of Magala (2010) who found out that significant positive correlations existed between internal efficiency and each of the three independent variables, namely: instructional materials, availability of human resources and financial resources. On the basis of the findings, Magala concluded that adequacy of instructional resources; availability of human resource and availability of financial resources are all positively correlated with the internal efficiency of secondary schools in Rubaga Division in Uganada.

Lastly, the above findings are partially in agreement and partially at variance with the findings of Olatoun (2012). On the one hand, the findings is in tandem with Olatoun's findings that there is significant relationship between physical resource utilization and repetition rate, dropout rate, fail- out rate and graduation rate (aspects of school efficiency) in Nigeria public secondary schools within the period of study. This attested to the fact that resources are vital for educational system production function. On the other hand, the findings of this study is in sharp contrast to Olatoun's findings that financial and human resources utilization seem not to have any relationship on students' repetition rate, dropout rate, and fail-out rate and graduation rate (aspects of school efficiency).

Finally, according to Neely (2015) the Resource Dependence Theory (RDT) argues that organizations are neither self-contained nor self-sufficient, making their relationships with the external environment of utmost importance to their effective operation. In other words, Neely (2015) suggests that organizations, in this case the school system are influenced by what happens in their external environments, but they are also often dependent on other actors and organizations within these environments for essential resources to the extent that these dependencies are critical to the organization's survival. Managing them becomes a top organizational priority. In view of this study, the availability of competency-based resources under its variants – human, financial, technical/material – as stipulated by the resource dependence theory is very capital for the effective implementation of competency-based teaching and by extension the efficiency of the school system.

#### 10. Conclusion

The thesis on which the study was based is that many school leavers, notably those from the secondary general education sector in Cameroon after completing various levels are not easily integrated into the job market due to their lack of employable skills that were not imbibed into them during their training. This necessitated the adoption of CBTAs in secondary general schools in Cameroon. The adequate availability of resources is a precondition for the successful implementation of competency-based teaching as the latter guarantees the socio-professional integration of school leavers into the job market. As per the findings of this study, the inadequate availability of these resources in the human, financial and physical domains constitute constraints or the factors that militate against the implementation of the educational policy of Competency-Based Teaching Approaches



(CBTAs) in Cameroonian schools. By extension, this has contributed significantly to the observed internal and external inefficiencies of the school system in Cameroon with all its attendant negative consequences, such as high repetition and failure rates, unemployment etc. Poor quality training in schools which favours knowledge acquisition and reproduction rather than knowledge application, has led to a poor human capital formation which has contributed to the high unemployment and underemployment rates amongst school leavers (Daniel, 2013; El-Mattrawy & Semmler, 2006; Isakova & Nazarbekova, 2011, Kirk, 2011; Lund, 2014; Ndayi (2014); Poku et al., 2013; Samiullah, 2014); causing them to indulge in societal vices such as cyber fraud, terrorism, political thuggery, banditry, prostitution, corruption, etc. due to joblessness after completing a particular level of schooling (Asaju et al., 2014; Galadima, 2014). Referring to poor human capital formation, it is difficult to talk about economic development in a nation where the external efficiency of the education system is weak. If graduates are unemployed, they cannot produce and lack of productivity kills progress.

Finally, it is implied that poor policy implementation in this case the Competency-Based Teaching Approaches (CBTAs) in Cameroon due to the unavailability of adequate resources has significantly contributed to the poor human capital formation observed. And since the attainment of the Vision 2035 national development plan is hinged on the availability of a skilled or productive human capital; the chances of accomplishing this vision is seriously compromised and its attainment unlikely if things do not change for the better as per the dictates of the human capital theory.

#### 11. Recommendations

Based on the objective of this study, it is recommended that law and policy makers should review the financing of education in Cameroon; the researcher is proposing a legislation that institutes an education tax or rate on the pay packets of all workers in the formal sector in Cameroon. The funds emanating thereof will be used to provide the requisite human, financial and physical (material/technical) resources that are currently lacking. Specifically, policy makers should also redirect the scarce financial resources to the training of teachers in the competency-based teaching domain, increase access to education, and alleviate the condition of the teaching corps in Cameroon to guarantee the education of the future citizens if emergence must be achieved.

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